Methods

Drug. Capsules containing 500mg Aspirin and identical capsules packed with 500mg microcrystalline cellulose prepared by Pharmacy Specialists (www.makerx.com), a licensed compounding pharmacy.

Procedure. Participants will be randomly assigned to either placebo or 500 mg of Aspirin in a double-blind procedure. Participants will fill out background demographic and personality questionnaires for about 20-30 minutes after consuming drug. The tasks will begin after 60 minutes has passed from drug or placebo intake, in order allow sufficient time for Aspirin to be absorbed into the brain (Cryer, 1998; Nagelschmitz, 2014).

Emotional Image Rating Task: Each participant is presented with 120 images, drawn from the previously published stimuli used in Leal et al. (2014), Schaller (2011) and the International Affective Picture System (Lang, 1995), in a pseudo-random order according to the procedures in Durso et al. (2015). Images were pre-categorized on evaluative dimensions corresponding to extremely unpleasant (35 images), moderately unpleasant (15 images), neutral (20 images), moderately pleasant (15 images), and extremely pleasant (35 images). The participants will be asked to evaluate 60 of the images on their valence by being asked the question: "To what extent is this picture positive or negative?" using a 9-point scale with 4 being extremely positive, -4 being extremely negative, and 0 being neither positive nor negative. They will then be shown 60 different images, this time being asked: "To what extent does this picture make you feel an emotional reaction?" in order to rate their level of emotional arousal. A similar 9-point scale was used, with 0 being "I feel little emotion" and 8 being "I feel an extreme amount of emotion." These two blocks are in a consecutive, non-counterbalanced order.

Balloon Analogue Risk Task: Once participants complete the emotional image rating task, they will complete the Balloon Analogue Risk Task (BART) to measure risk taking behavior (Lejuez, et al., 2002). In this task, participants have the opportunity to inflate 15 balloons depicted on the computer screen. A trial begins with a small, uninflated balloon on the computer screen. Participants inflate the balloon, with each pump earning imaginary money, and were told their goal was to earn as much money as possible in the task. Participants could collect their total trial earnings and move them to a permanent bank at any point. However, participants also were told that the balloon can burst as early as the first trial and as late as when the balloon fills the entire computer screen. Bursts were accompanied by a bursting sound and popping animation. If the balloon burst prior to the participants choosing to collect their money, they lost any amount earned thus far on that trial, and had to move on to the next trial having added no money to their permanent bank. Participants were not told about the maximum number of pumps nor the likelihood of bursts, nor that, for each balloon, the first pump had a 1/128 probability of bursting, the second pump 1/127, and so on until on the 128thpump there was a 1/1 probability of bursting.

Memory Recognition Task: Participants are then asked to perform a memory recognition task based on the paradigm in Leal et al. (2014). Participants were shown 180 images and have to classify each as an image that they had seen in the emotional rating task or a new image. Images were divided equally among four different groups: 45 old images that appeared in the emotional rating task, 45 new high similarity lures that looked very closely like images shown in the emotional rating task (ex. an image of a crossing guard, after being shown an image of the same crossing guard from a slightly different angle in the first task), 45 new low similarity lures that looked somewhat like images shown in the emotional rating task (ex. an image of a dirty

Study Design and Analysis Plan: Aspirin Effects on Emotional Reactions, NCT04146532, April 28, 2020 stall, after being shown an image of a dirty toilet in the first task), and 45 new foils that did not bare any resemblance to images from the emotional rating task (ex. an image of an airplane, after not being shown an image of aircraft in the first task). Each group was evenly composed of 9 images from each extremely unpleasant, moderately unpleasant, neutral, moderately pleasant, and extremely pleasant image category. For analysis, d-prime (d') scores were then calculated for each participant in each normative rating category. d' is a measure of a participant's signal detection ability and is unaffected by response bias. It was calculated by subtracting the z-score of each participant's hit rate by the z-score of their false alarm rate for each normative rating category.

Saliva Sample: Participants will then be asked to provide two saliva samples of 1.5 mL in order to measure prostaglandin levels in the saliva. Saliva samples are taken at the beginning of the experiment 5 minutes after the ingestion of drug or placebo, and at the end of the experiment after participants had completed all computerized tasks, approximately 90 minutes after ingestion of drug or placebo.

Data Analysis Plan

For analysis of the evaluations and arousal ratings of the emotional images, identical procedures to those done in Durso, Luttrell, & Way, (2015) will be performed. Specifically, responses will be subjected to a 2 (treatment: Aspirin, placebo) × 5 (normative rating: extremely unpleasant, moderately unpleasant, neutral, moderately pleasant, extremely pleasant) mixed-model ANOVA. Participants who respond faster than 500msec will be dropped from analyses as they are deemed to not be taking the task seriously.

For the Balloon Analogue Risk Task, the primary dependent measure will be adjusted average number of pumps (the number of pumps on trials where the balloon didn't burst) following the initial work in this area (Lejuez, et al., 2002).

For the memory recognition task, the d' score will be subjected to the same analytical approach as that for the evaluations and arousal ratings.

References

- Cryer B, Feldman M (1998). Cyclooxygenase-1 and cyclooxygenase-2 selectivity of widely used nonsteroidal anti-inflammatory drugs. *American Journal of Medicine*: 104(5), 413–421. doi: 10.1016/s0002-9343(98)00091-6.
- Durso GRO, Luttrell A, Way BM (2015). Over-the-counter relief from pains and pleasures alike:

 Acetaminophen blunts evaluation sensitivity to both negative and positive stimuli.

 Psychological Science: 26(6), 750–758.
- Hayes, A. F. (2012). PROCESS: A versatile computational tool for observed variable mediation, moderation, and conditional process modeling [White paper]. Retrieved from http://www.afhayes.com/public/process2012.
- Lang P.J. (1995). The Emotion Probe: Studies of Motivation and Attention. *American Psychologist*: 50(5): 372-385.
- Leal S.L., Tighe S.K., Yassa M.A. (2014). Asymmetric effects of emotion on mnemonic interference. *Neurobiol Learn Mem*, 111:41-48.
- Lejuez, C. W., Read J.P., Kahler C.W., Richards J.B., Ramsey S.E., Stuart G.L., Strong D.R., Brown R.A. (2002). Evaluation of a Behavioral Measure of Risk Taking: The Balloon Analogue Risk Task (BART). *Journal of Experimental Psychology: Applied*, 8(2):75–84.
- Nagelschmitz J, Blunck M, Kraetzschmar J, et al (2014). Pharmacokinetics and pharmacodynamics of acetylsalicylic acid after intravenous and oral administration to healthy volunteers. *Clinical Pharmacology*: 6(1), 51–9.

Schaller M., Miller G.E., Gervais W.M., Yager S., Chen E. (2009). Mere Visual Perception of

Other People's Disease Symptoms Facilitates a More Aggressive Immune Response.

Psychological Science: 21(5), 649-652. doi: 10.1177/0956797610368064

Appendix

Images used in Emotional Image Rating Task

All images from both the emotional image rating task and the memory recognition task were drawn from the previously published stimuli used in Leal et al. (2014), Schaller (2011) and the International Affective Picture System (Lang, 1995). The table below lists the set, image number, and valance category for each image used.

Image Set	Image Number	Valance Category
International Affective Picture System	1052	Extremely Unpleasant
International Affective Picture System	1111	Extremely Unpleasant
International Affective Picture System	1201	Extremely Unpleasant
Leal et al. (2014)	10040a	Extremely Unpleasant
Leal et al. (2014)	10041a	Extremely Unpleasant
Leal et al. (2014)	10044a	Extremely Unpleasant
Schaller (2011)	d6	Extremely Unpleasant
Schaller (2011)	d2	Extremely Unpleasant
Schaller (2011)	d4	Extremely Unpleasant
Schaller (2011)	d5	Extremely Unpleasant
Leal et al. (2014)	10012a	Extremely Unpleasant
Leal et al. (2014)	10023a	Extremely Unpleasant
Leal et al. (2014)	10032a	Extremely Unpleasant
Leal et al. (2014)	10048a	Extremely Unpleasant
International Affective Picture System	6560	Extremely Unpleasant
Leal et al. (2014)	10035a	Extremely Unpleasant
Leal et al. (2014)	10002a	Extremely Unpleasant
Leal et al. (2014)	10009a	Extremely Unpleasant
Leal et al. (2014)	10025a	Extremely Unpleasant
Leal et al. (2014)	10031a	Extremely Unpleasant
Leal et al. (2014)	10033a	Extremely Unpleasant
International Affective Picture System	3010	Extremely Unpleasant
International Affective Picture System	3061	Extremely Unpleasant
International Affective Picture System	3130	Extremely Unpleasant
International Affective Picture System	3140	Extremely Unpleasant
International Affective Picture System	3150	Extremely Unpleasant
Leal et al. (2014)	10038a	Extremely Unpleasant
Leal et al. (2014)	10039a	Extremely Unpleasant
Leal et al. (2014)	10001a	Extremely Unpleasant
Leal et al. (2014)	10010a	Extremely Unpleasant
Leal et al. (2014)	10015a	Extremely Unpleasant
Leal et al. (2014)	10019a	Extremely Unpleasant
Leal et al. (2014)	10020a	Extremely Unpleasant
Leal et al. (2014)	10029a	Extremely Unpleasant
Leal et al. (2014)	10005a	Extremely Unpleasant
Schaller (2011)	d10	Moderately Unpleasant
Schaller (2011)	d3	Moderately Unpleasant
International Affective Picture System	3250	Moderately Unpleasant
International Affective Picture System	9594	Moderately Unpleasant

Leal et al. (2014)	10013a	Moderately Unpleasant
Leal et al. (2014)	10043a	Moderately Unpleasant
International Affective Picture System	2457	Moderately Unpleasant
Leal et al. (2014)	10022a	Moderately Unpleasant
Leal et al. (2014)	10028a	Moderately Unpleasant
Leal et al. (2014)	10006a	Moderately Unpleasant
Leal et al. (2014)	10016a	Moderately Unpleasant
Leal et al. (2014)	10021a	Moderately Unpleasant
Leal et al. (2014)	10036a	Moderately Unpleasant
Leal et al. (2014)	10045a	Moderately Unpleasant
Leal et al. (2014)	10046a	Moderately Unpleasant
Leal et al. (2014)	20003a	Neutral
Leal et al. (2014)	20010a	Neutral
Leal et al. (2014)	20012a	Neutral
Leal et al. (2014)	20015a	Neutral
Leal et al. (2014)	20016a	Neutral
Leal et al. (2014)	20017a	Neutral
Leal et al. (2014)	20020a	Neutral
Leal et al. (2014)	20022a	Neutral
Leal et al. (2014)	20023a	Neutral
Leal et al. (2014)	20025a	Neutral
Leal et al. (2014)	20026a	Neutral
Leal et al. (2014)	20028a	Neutral
Leal et al. (2014)	20029a	Neutral
Leal et al. (2014)	20031a	Neutral
Leal et al. (2014)	20035a	Neutral
Leal et al. (2014)	20037a	Neutral
Leal et al. (2014)	20038a	Neutral
Leal et al. (2014)	20041a	Neutral
Leal et al. (2014)	20043a	Neutral
Leal et al. (2014)	20048a	Neutral
Leal et al. (2014)	20006a	Moderately Pleasant
Leal et al. (2014)	20007a	Moderately Pleasant
Leal et al. (2014)	20014a	Moderately Pleasant
Leal et al. (2014)	20019a	Moderately Pleasant
Leal et al. (2014)	30009a	Moderately Pleasant
Leal et al. (2014)	30010a	Moderately Pleasant
Leal et al. (2014)	30025a	Moderately Pleasant
Leal et al. (2014)	30030a	Moderately Pleasant
Leal et al. (2014)	30031a	Moderately Pleasant
Leal et al. (2014)	30033a	Moderately Pleasant
Leal et al. (2014)	30034a	Moderately Pleasant
Leal et al. (2014)	30035a	Moderately Pleasant
International Affective Picture System	4800	Moderately Pleasant
Leal et al. (2014)	30039a	Moderately Pleasant
International Affective Picture System	4647	Moderately Pleasant
International Affective Picture System	4220	Extremely Pleasant
International Affective Picture System	4290	Extremely Pleasant
International Affective Picture System	4660	Extremely Pleasant
International Affective Picture System	4670	Extremely Pleasant
International Affective Picture System	4680	Extremely Pleasant
Leal et al. (2014)	30002a	Extremely Pleasant
Leal et al. (2014)	30003a	Extremely Pleasant
201 00 01. (2011)	200024	

Leal et al. (2014)	30005a	Extremely Pleasant
Leal et al. (2014)	30006a	Extremely Pleasant
Leal et al. (2014)	30008a	Extremely Pleasant
Leal et al. (2014)	30011a	Extremely Pleasant
Leal et al. (2014)	30012a	Extremely Pleasant
Leal et al. (2014)	30013a	Extremely Pleasant
Leal et al. (2014)	30015a	Extremely Pleasant
Leal et al. (2014)	30016a	Extremely Pleasant
Leal et al. (2014)	30018a	Extremely Pleasant
Leal et al. (2014)	30019a	Extremely Pleasant
Leal et al. (2014)	30020a	Extremely Pleasant
Leal et al. (2014)	30022a	Extremely Pleasant
Leal et al. (2014)	30023a	Extremely Pleasant
Leal et al. (2014)	30026a	Extremely Pleasant
Leal et al. (2014)	30027a	Extremely Pleasant
Leal et al. (2014)	30028a	Extremely Pleasant
Leal et al. (2014)	30029a	Extremely Pleasant
Leal et al. (2014)	30036a	Extremely Pleasant
Leal et al. (2014)	30040a	Extremely Pleasant
Leal et al. (2014)	30041a	Extremely Pleasant
Leal et al. (2014)	30042a	Extremely Pleasant
Leal et al. (2014)	30045a	Extremely Pleasant
Leal et al. (2014)	30046a	Extremely Pleasant
Leal et al. (2014)	30047a	Extremely Pleasant
Leal et al. (2014)	30049a	Extremely Pleasant
Leal et al. (2014)	30051a	Extremely Pleasant
Leal et al. (2014)	30050a	Extremely Pleasant

Images used in Memory Recognition Task

Image Set	Image Number	Valance Category	Target/Foil/Lure
Leal et. al (2014)	10012a	Extremely Unpleasant	Target
Leal et. al (2014)	10039a	Extremely Unpleasant	Target
Leal et. al (2014)	10041a	Extremely Unpleasant	Target
Leal et. al (2014)	10009a	Extremely Unpleasant	Target
Leal et. al (2014)	10015a	Extremely Unpleasant	Target
Schaller (2012)	d6	Extremely Unpleasant	Target
Schaller (2012)	d5	Extremely Unpleasant	Target
International Affective Picture System	6560	Extremely Unpleasant	Target
Leal et. al (2014)	10005a	Extremely Unpleasant	Target
Leal et. al (2014)	10043a	Moderately Unpleasant	Target
Leal et. al (2014)	10046a	Moderately Unpleasant	Target
Leal et. al (2014)	10022a	Moderately Unpleasant	Target
Leal et. al (2014)	10013a	Moderately Unpleasant	Target
Leal et. al (2014)	10016a	Moderately Unpleasant	Target
Leal et. al (2014)	10036a	Moderately Unpleasant	Target
Schaller (2012)	d3	Moderately Unpleasant	Target
Schaller (2012)	d10	Moderately Unpleasant	Target
International Affective Picture System	2457	Moderately Unpleasant	Target
Leal et. al (2014)	20029a	Neutral	Target
Leal et. al (2014)	20026a	Neutral	Target
Leal et. al (2014)	20025a	Neutral	Target
Leal et. al (2014)	20028a	Neutral	Target
Leal et. al (2014)	20022a	Neutral	Target
Leal et. al (2014)	20003a	Neutral	Target
Leal et. al (2014)	20010a	Neutral	Target
Leal et. al (2014)	20012a	Neutral	Target
Leal et. al (2014)	20017a	Neutral	Target
International Affective Picture System	4647	Moderately Pleasant	Target
Leal et. al (2014)	30034a	Moderately Pleasant	Target
International Affective Picture System	4800	Moderately Pleasant	Target
Leal et. al (2014)	30035a	Moderately Pleasant	Target
Leal et. al (2014)	. al (2014) 30010a Moderately Pleasant		Target
Leal et. al (2014)	20007a	Moderately Pleasant	Target
Leal et. al (2014)	20006a	Moderately Pleasant	Target
Leal et. al (2014)	30009a	Moderately Pleasant	Target
Leal et. al (2014)	30030a	Moderately Pleasant	Target
International Affective Picture System	4220	Extremely Pleasant	Target
Leal et. al (2014)	30003a	Extremely Pleasant	Target
International Affective Picture System	4660	Extremely Pleasant	Target
Leal et. al (2014)	30051a	Extremely Pleasant	Target
International Affective Picture System	4290	Extremely Pleasant	Target
Leal et. al (2014)	30012a	Extremely Pleasant	Target
International Affective Picture System	4670	Extremely Pleasant	Target
Leal et. al (2014)	30018a	Extremely Pleasant	Target
Leal et. al (2014)	30019a	Extremely Pleasant	Target
Leal et. al (2014)	10023c	Extremely Unpleasant	High Similarity Lure
Leal et. al (2014)	10005c	Extremely Unpleasant	High Similarity Lure
Leal et. al (2014)	10035c	Extremely Unpleasant	High Similarity Lure
Leal et. al (2014)	10002c	Extremely Unpleasant	High Similarity Lure

Loglot al (2014)	10021.	Entrare de Harles sont	High Cincilonity Lynn
Leal et. al (2014)	10031c	Extremely Unpleasant	High Similarity Lure
Leal et. al (2014)	10001c	Extremely Unpleasant	High Similarity Lure
Leal et. al (2014)	10038c	Extremely Unpleasant	High Similarity Lure
Leal et. al (2014)	10029c	Extremely Unpleasant	High Similarity Lure
Leal et. al (2014)	10025c	Extremely Unpleasant	High Similarity Lure
Leal et. al (2014)	10043c	Moderately Unpleasant	High Similarity Lure
Leal et. al (2014)	10013c	Moderately Unpleasant	High Similarity Lure
Leal et. al (2014)	10046c	Moderately Unpleasant	High Similarity Lure
Leal et. al (2014)	10045c	Moderately Unpleasant	High Similarity Lure
Leal et. al (2014)	10021c	Moderately Unpleasant	High Similarity Lure
Leal et. al (2014)	10022c	Moderately Unpleasant	High Similarity Lure
Leal et. al (2014)	10046c	Moderately Unpleasant	High Similarity Lure
Leal et. al (2014)	10036c	Moderately Unpleasant	High Similarity Lure
Leal et. al (2014)	10006c	Moderately Unpleasant	High Similarity Lure
Leal et. al (2014)	20037c	Neutral	High Similarity Lure
Leal et. al (2014)	20029c	Neutral	High Similarity Lure
Leal et. al (2014)	20025c	Neutral	High Similarity Lure
Leal et. al (2014)	20043c	Neutral	High Similarity Lure
Leal et. al (2014)	20031c	Neutral	High Similarity Lure
Leal et. al (2014)	20035c	Neutral	High Similarity Lure
Leal et. al (2014)	20003c	Neutral	High Similarity Lure
Leal et. al (2014)	20010c	Neutral	High Similarity Lure
Leal et. al (2014)	20015c	Neutral	High Similarity Lure
Leal et. al (2014)	20019c	Moderately Pleasant	High Similarity Lure
Leal et. al (2014)	30034c	Moderately Pleasant	High Similarity Lure
Leal et. al (2014)	20014c	Moderately Pleasant	High Similarity Lure
Leal et. al (2014)	30033c	Moderately Pleasant	High Similarity Lure
Leal et. al (2014)	30039c	Moderately Pleasant	High Similarity Lure
Leal et. al (2014)	30035c	Moderately Pleasant	High Similarity Lure
Leal et. al (2014)	20006c	Moderately Pleasant	High Similarity Lure
Leal et. al (2014)	30009c	Moderately Pleasant	High Similarity Lure
Leal et. al (2014)	30010c	Moderately Pleasant	High Similarity Lure
Leal et. al (2014)	30019c	Extremely Pleasant	High Similarity Lure
Leal et. al (2014)	30013c	Extremely Pleasant	High Similarity Lure
Leal et. al (2014)	30016c	Extremely Pleasant	High Similarity Lure
Leal et. al (2014)	30023c	Extremely Pleasant	High Similarity Lure
Leal et. al (2014)	30046c	Extremely Pleasant	High Similarity Lure
Leal et. al (2014)	30008c	Extremely Pleasant	High Similarity Lure
Leal et. al (2014)	30002c	Extremely Pleasant	High Similarity Lure
Leal et. al (2014)	30005c	Extremely Pleasant	High Similarity Lure
Leal et. al (2014)	30020c	Extremely Pleasant	High Similarity Lure
Leal et. al (2014)	10032b	Extremely Unpleasant	Low Similarity Lure
Leal et. al (2014)	10039b	Extremely Unpleasant	Low Similarity Lure
Leal et. al (2014)	10048b	Extremely Unpleasant	Low Similarity Lure
Leal et. al (2014)	10031b	Extremely Unpleasant	Low Similarity Lure
Leal et. al (2014)	10040b	Extremely Unpleasant	Low Similarity Lure
Leal et. al (2014)	10020b	Extremely Unpleasant	Low Similarity Lure
Leal et. al (2014)	10012b	Extremely Unpleasant	Low Similarity Lure
Leal et. al (2014)	10023b	Extremely Unpleasant	Low Similarity Lure
Leal et. al (2014)	10035b	Extremely Unpleasant	Low Similarity Lure
Leal et. al (2014)	10013b	Moderately Unpleasant	Low Similarity Lure
Leal et. al (2014)	10036b	Moderately Unpleasant	Low Similarity Lure
Leal et. al (2014)	10006b	Moderately Unpleasant	Low Similarity Lure
Dour Ot. ar (2017)	100000	into del atery empreusum	2011 Similarity Duit

I and at al (2014)	10017	Moderately Huntagent	I am Cincilanita I ama
Leal et. al (2014)	10016b	Moderately Unpleasant	Low Similarity Lure
Leal et. al (2014)	10021b	Moderately Unpleasant	Low Similarity Lure
Leal et. al (2014)	10028b	Moderately Unpleasant	Low Similarity Lure
Leal et. al (2014)	10043b	Moderately Unpleasant	Low Similarity Lure
Leal et. al (2014)	10022b	Moderately Unpleasant	Low Similarity Lure
Leal et. al (2014)	10046b	Moderately Unpleasant	Low Similarity Lure
Leal et. al (2014)	20048b	Neutral	Low Similarity Lure
Leal et. al (2014)	20026b	Neutral	Low Similarity Lure
Leal et. al (2014)	20025b	Neutral	Low Similarity Lure
Leal et. al (2014)	20022b	Neutral	Low Similarity Lure
Leal et. al (2014)	20017b	Neutral	Low Similarity Lure
Leal et. al (2014)	20016b	Neutral	Low Similarity Lure
Leal et. al (2014)	20003b	Neutral	Low Similarity Lure
Leal et. al (2014)	20010b	Neutral	Low Similarity Lure
Leal et. al (2014)	20012b	Neutral	Low Similarity Lure
Leal et. al (2014)	30010b	Moderately Pleasant	Low Similarity Lure
Leal et. al (2014)	20006b	Moderately Pleasant	Low Similarity Lure
Leal et. al (2014)	30030b	Moderately Pleasant	Low Similarity Lure
Leal et. al (2014)	20007b	Moderately Pleasant	Low Similarity Lure
Leal et. al (2014)	20014b	Moderately Pleasant	Low Similarity Lure
Leal et. al (2014)	30031b	Moderately Pleasant	Low Similarity Lure
Leal et. al (2014)	30009b	Moderately Pleasant	Low Similarity Lure
Leal et. al (2014)	30033b	Moderately Pleasant	Low Similarity Lure
Leal et. al (2014)	30035b	Moderately Pleasant	Low Similarity Lure
Leal et. al (2014)	30003b	Extremely Pleasant	Low Similarity Lure
Leal et. al (2014)	30011b	Extremely Pleasant	Low Similarity Lure
Leal et. al (2014)	30040b	Extremely Pleasant	Low Similarity Lure
Leal et. al (2014)	30049b	Extremely Pleasant	Low Similarity Lure
Leal et. al (2014)	30018b	Extremely Pleasant	Low Similarity Lure
Leal et. al (2014)	30029b	Extremely Pleasant	Low Similarity Lure
Leal et. al (2014)	30002b	Extremely Pleasant	Low Similarity Lure
Leal et. al (2014)	30036b	Extremely Pleasant	Low Similarity Lure
Leal et. al (2014)	30026b	Extremely Pleasant	Low Similarity Lure
Leal et. al (2014)	40041a	Extremely Unpleasant	Foil
Leal et. al (2014)	40038a	Extremely Unpleasant	Foil
Leal et. al (2014)	40006a	Extremely Unpleasant	Foil
Leal et. al (2014)	40009a	Extremely Unpleasant	Foil
Leal et. al (2014)	40022a	Extremely Unpleasant	Foil
Leal et. al (2014)	40035a	Extremely Unpleasant	Foil
Leal et. al (2014)	40002a	Extremely Unpleasant	Foil
Leal et. al (2014)	40010a	Extremely Unpleasant	Foil
Leal et. al (2014)	40011a	Extremely Unpleasant	Foil
Leal et. al (2014)	40007a	Moderately Unpleasant	Foil
Leal et. al (2014)	40013a	Moderately Unpleasant	Foil
Leal et. al (2014)	40028a	Moderately Unpleasant	Foil
Leal et. al (2014)	40031a	Moderately Unpleasant	Foil
Leal et. al (2014)	40044a	Moderately Unpleasant	Foil
Leal et. al (2014)	40029a	Moderately Unpleasant	Foil
Leal et. al (2014)	40008a	Moderately Unpleasant	Foil
Leal et. al (2014)	40012a	Moderately Unpleasant	Foil
Leal et. al (2014)	40015a	Moderately Unpleasant	Foil
Leal et. al (2014)	50005a	Neutral	Foil
Leal et. al (2014)	50007a	Neutral	Foil
Loai ot. ai (2014)	30007a	redual	1 011

Study Design and Analysis Plan: Aspirin Effects on Emotional Reactions, NCT04146532, April 28, 2020

	1	
50010a	Neutral	Foil
50014a	Neutral	Foil
50016a	Neutral	Foil
50042a	Neutral	Foil
50013a	Neutral	Foil
50017a	Neutral	Foil
50018a	Neutral	Foil
60001a	Moderately Pleasant	Foil
60003a	Moderately Pleasant	Foil
60011a	Moderately Pleasant	Foil
60019a	Moderately Pleasant	Foil
60002a	Moderately Pleasant	Foil
60004a	Moderately Pleasant	Foil
60017a	Moderately Pleasant	Foil
60032a	Moderately Pleasant	Foil
60041a	Moderately Pleasant	Foil
60048a	Extremely Pleasant	Foil
60043a	Extremely Pleasant	Foil
60038a	Extremely Pleasant	Foil
60033a	Extremely Pleasant	Foil
60027a	Extremely Pleasant	Foil
60010a	Extremely Pleasant	Foil
60039a	Extremely Pleasant	Foil
60024a	Extremely Pleasant	Foil
60020a	Extremely Pleasant	Foil
	50014a 50016a 50042a 50013a 50017a 50018a 60001a 60003a 60011a 60002a 60004a 60004a 60041a 60048a 60043a 60038a 60038a 60027a 60010a 60039a 60024a	50014a Neutral 50016a Neutral 50042a Neutral 50013a Neutral 50017a Neutral 50018a Neutral 60001a Moderately Pleasant 60003a Moderately Pleasant 60011a Moderately Pleasant 60019a Moderately Pleasant 60002a Moderately Pleasant 60004a Moderately Pleasant 60017a Moderately Pleasant 60032a Moderately Pleasant 60041a Moderately Pleasant 60048a Extremely Pleasant 60038a Extremely Pleasant 60033a Extremely Pleasant 60027a Extremely Pleasant 60010a Extremely Pleasant 60039a Extremely Pleasant 60024a Extremely Pleasant

Questionnaires

Background Measures Recent Health Behaviors Questionnaire

1.	What is your height?feetinches
2.	What is your weight? (in pounds)
3.	What time did you go to bed last night?
4.	How long (in minutes) did it take you to fall asleep last night?
5.	What time did you get up this morning?
6.	On a scale of 1 to 10, how well did you sleep? (1=poorly, 10=well)
7.	How many hours of actual sleep did you get? (This may be different than the number of hours you spent in bed?
8.	Approximately how long ago did you last eat? Was it a (indicate one): Snack Light Meal Full Meal
9.	Have you done any aerobic exercise today? If yes, how many minutes? If yes, how long ago (in hours)?
10.	On an average week, how many days do you do aerobic exercise?

11.	When you do exercise, how long do you usually work out? (in minutes)						
1.	In general, would you sa	y that your health	is (indicate	e one):			
	Excellent Very Go	od Good	Fa	ir	Poor		
1	Please answer the following 3 questions by circling a number on the right:	Strongly Disagree				Strongly Agree	
2.	Over the last couple of days, I have not been feeling well.	1	2	3	4	5	
3.	Lately, I have been feeling a little under the weather	1	2	3	4	5	
4.	I have felt sick within the last week.	1	2	3	4	5	
5.	When was the last time you had a cold, flu, dental infection, or other infection? Today A couple of days ago A week ago A couple of weeks ago A month ago A few months ago A year or more ago						
6.	Did you seek medical ca No	·					
	If yes, how many times i illness?	n the last 3 month			aith center	ior an	
7.	Did you take any over-th No any infection in the last	·	cription me	edications f	or a cold, fl	u, or Yes	

1	
	If yes, what medications
	Please answer the following questions by circling a response on the right:
	1. In the box below, please list all medications AND vitamins or supplements you are currently taking, including pills, patches, lotions or injections. Medications can be prescription medications or over-the-counter medications. Be sure to include the NAME, DOSE, AMOUNT and FREQUENCY you take the medications or supplements, putting a comma between each one. If the medication or supplement does not have a particular dose, please put "NA" after name and before frequency. See examples below.
	Example 1: Oxytrol 3.9 mg 1 patch every 4 days, Femgest progesterone cream no dosage apply to hands once per day, Synthroid 75 mcg 1 pill once per day.
	Example 2: Timoptic 0.25% 2 drops per eye twice per day, Saw Palmetto 160 mg 1 pill twice per day, Zocor 20 mg each night.
	Example 3: Calcium 333mg/pill 3 pills per day, Vitamin C 500mg 1 pill per day, Vitamin D 1000mg 1 pill per day.
2.	Are you currently taking birth control medication? Yes No
3.	How often do you typically use marijuana? (indicate one)
	Almost every day At least once a month
	Several times a week Several times a year
	At least once a week At least once a year

	Several t	times a month		Never		
4.		=	e marijuana? (If i per of days, mont	n the last day, ple hs, or years.)	ase indicate the I	number of
	Hours:	Days:	Month	ıs: Ye	ears:	-
	I have	never used mari	juana.			
5.	How many c	igarettes per day	do you smoke (i	ndicate one respo	nse)?	
	0	1 to 10	10 to 20 2	0 to 30 30 o	r more	
6.	If you smoke minutes and	-	been since your	last cigarette? (Pl	ease indicate the	number of
		Minutes:	Hours:	<u> </u>		
7.	. When was the last time you consumed an alcoholic beverage? (If in the last day, please indicate the number of hours. If not record the number of days, months, or years.)					
	Hours:	Days:	Month	s: Ye	ears:	-
	I do no	ot drink alcohol.				
	Please answer the	following 3 que	stions by circling	a response on the	e right:	
	How		, ,	2 - 4 times a	2-3	4 or more
8.	often do you have a drink containing alcohol?	Never	Monthly	month	times a week	times a week
9.	How many drinks containing alcohol do you have on a typical	1 or 2	3 or 4	5 or 6	7 to 9	10 or more

	day when you are drinking?						
10.	How often do you have six or more drinks on one occasion?	Never	Less than Monthly	Monthly	,	Weekly	Daily or almost Daily
			l				
11.	Do you have a	rthritis, rheumat	oid arthritis, or joi	int problems?	Υe	es 1	No
12.	-	rthritis or any im ency such as HIV?	mune disorders th	nat might lead to	o Yes	No	
13.		ny chronic illness em (e.g Cushing'	ses that affect the ss Disease)?		Yes	No	
14.	Are you diabet	ic (Type I or II)?			Yes	No	

Think of this ladder as representing where people stand in the United States.

At the **top** of the ladder are the people who are best off—those who have the most money, the most education, and the most respected jobs. At the **bottom** are the people who are the worst off— who have the least money, least education, and the least respected jobs or no job. The higher up you are on this ladder, the closer you are to the people at the very top; the lower you are, the closer you are to the people at the very bottom.

Where would you place yourself on this ladder?

Please place a large "X" on the rung where you think you stand at this time in your life, relative to other people in the United States.



Political Ideology (Wilson, 1968)

G.D. Wilson, J.R. Patterson, A new measure of conservatism, Br. J. Soc. Clin.Psychol. 7 (1968) 264–269. Mofied by Mills, M., Gonzalez, F. J., Giuseffi, K., Sievert, B., Smith, K. B., Hibbing, J. R., & Dodd, M. D. (2016). Political conservatism predicts asymmetries in emotional scene memory. *Behavioural brain research*, 306, 84–90.

Indicate your agreement with the following issues:

, ,	strongly disagree with (1)	disagree with (2)	uncertain about (3)	agree with (4)	strongly agree with (5)
school prayer (1)	\circ	\circ	\circ	\bigcirc	\bigcirc
pacifism (2)		\bigcirc	\bigcirc	\bigcirc	\bigcirc
stopping immigration (3)	\circ	\circ	\circ	\circ	\circ
death penalty (4)	\circ	\circ	\circ	\circ	\circ
government- arranged healthcare (5)	\circ	\circ	\circ	\circ	0
premarital sex (6)	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
gay marriage (7)	\bigcirc	\circ	\bigcirc	\circ	\bigcirc
abortion rights (8)	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
evolution (9)	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
biblical truth (10)	\circ	\bigcirc	\circ	\circ	\bigcirc
increased welfare spending (11)	0	0	0	\circ	0
protecting gun rights (12)	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
increasing military spending (13)	0	0	\circ	\circ	\circ
government regulation of business (14)	\bigcirc	0	\circ	\circ	\circ
small government (15)	0	\circ	\circ	\circ	\circ

Study Design an	d Analysis Pla	n: Aspirin Effec	ts on Emotiona	Reactions, NCT	04146532, April 2	8, 2020				
foreign aide (16)	\circ	\circ			0	\circ				
lowering taxe (17)	S	\circ			0	\bigcirc				
stem cell research (18)	\bigcirc	\circ			0	\bigcirc				
abstinence- only sex education (19	()	\circ			0	\bigcirc				
allowing torture of terrorism suspects (20)	0	0			0	0				
When it comes to politics in general, do you usually think of yourself as liberal, moderate, or conservative?										
O very libera	l (1)									
O liberal (2)										
osomewhat	liberal (3)									
O moderate	(4)									
osomewhat	conservative	(5)								
O conservati	ve (6)									
O very conse	rvative (7)									
In general, I co	nsider myself	a:								
O Democrat	(1)									
O Republicar	n (2)									
OLibertarian	(3)									
Other (4)										
When it comes or something e		general, do yo	ou usually thin	k of yourself as I	iberal, moderat	e, conservative				
Very Liberal 1	Liberal 2	Somewhat Liberal 3	Moderate 4	Somewhat Conservative 5	Conservative 6	Very Conservative 7				

On social issues, you consider yourself to be:

Very		Somewhat		Somewhat	Very	
Liberal	Liberal	Liberal	Moderate	Conservative	Conservative	Conservative
1	2	3	4	5	6	7

On foreign policy issues, you consider yourself to be:

Very		Somewhat		Somewhat	Very	
Liberal	Liberal	Liberal	Moderate	Conservative	Conservative	Conservative
1	2	3	4	5	6	7

On economic issues, you consider yourself to be:

Very		Somewhat		Somewhat	Very	
Liberal	Liberal	Liberal	Moderate	Conservative	Conservative	Conservative
1	2	3	4	5	6	7

Emotionality Measures

Domain Specific Risk Taking (Blais & Weber, 2006)

Blais, A. & Weber, E. U. (2006). A domain-specific risk-taking (DOSPERT) scale for adult populations. *Judgment and Decision Making*, 1(1): 33-47.

Risk Perception

People often see some risk in situations that contain uncertainty about what the outcome or consequences will be and for which there is the possibility of negative consequences. However, riskiness is a very personal and intuitive notion, and we are interested in your gut level assessment of how risky each situation or behavior is. For each of the following statements, please indicate how risky you perceive each situation. Provide a rating from Not at all Risky to Extremely Risky, using the following scale:

1 Not at all Risky 2 Slightly Risky 3 Somewhat Risky 4 Moderately Risky 5 Risky 6 Very Risky 7Extremely Risky

Expected Benefits

For each of the following statements, please indicate the benefits you would obtain from each situation. Provide a rating from 1 to 7, using the following scale:

1 No Benefits at all 2 3 4 Moderate Benefits 5 6 7 Great Benefits

Items

- 1. Admitting that your tastes are different from those of a friend. (S)
- 2.Going camping in the wilderness. (R)
- 3.Betting a day's income at the horse races. (F/G)
- 4.Investing 10% of your annual income in a moderate growth diversified fund. (F/I)
- 5. Drinking heavily at a social function. (H/S)
- 6. Taking some questionable deductions on your income tax return. (E)
- 7. Disagreeing with an authority figure on a major issue. (S)
- 8.Betting a day's income at a high-stake poker game. (F/G)
- 9. Having an affair with a married man/woman. (E)
- 10. Passing off somebody else's work as your own. (E)
- 11. Going down a ski run that is beyond your ability. (R)
- 12. Investing 5% of your annual income in a very speculative stock. (F/I)

- 13. Going whitewater rafting at high water in the spring. (R)
- 14.Betting a day's income on the outcome of a sporting event (F/G)
- 15.Engaging in unprotected sex. (H/S)
- 16. Revealing a friend's secret to someone else. (E)
- 17. Driving a car without wearing a seat belt. (H/S)
- 18.Investing 10% of your annual income in a new business venture. (F/I)
- 19. Taking a skydiving class. (R)
- 20. Riding a motorcycle without a helmet. (H/S)
- 21. Choosing a career that you truly enjoy over a more secure one. (S)
- 22. Speaking your mind about an unpopular issue in a meeting at work. (S)
- 23. Sunbathing without sunscreen. (H/S)
- 24.Bungee jumping off a tall bridge. (R)
- 25. Piloting a small plane. (R)
- 26. Walking home alone at night in an unsafe area of town. (H/S)
- 27. Moving to a city far away from your extended family. (S)
- 28. Starting a new career in your mid-thirties. (S)
- 29.Leaving your young children alone at home while running an errand. (E)
- 30. Not returning a wallet you found that contains \$200. (E)

Note. E = Ethical, F = Financial, H/S = Health/Safety, R = Recreational, and S = Social.

Toronto Alexithymia Scale

Bagby, R. M., Parker, J. D. A. & Taylor, G. J. (1994). The twenty-item Toronto Alexithymia Scale-I. Item selection and cross-validation of the factor structure. Journal of Psychosomatic Research, 38, 23-32.

TAS - 20

Using the scale provided as a guide, indicate how much you agree or disagree with each of the following statements by circling the appropriate number. Circle only one number for each statement.

1 = STRONGLY DISAGREE

- 2 = MODERATELY DISAGREE
- 3 = NEITHER DISAGREE NOR AGREE
- 4 = MODERATELY AGREE
- 5 = STRONGLY AGREE

1.	1	2	3	4	5
2.	1	2	3	4	5
3.	1	2	3	4	5
4.	1	2	3	4	5
5.	1	2	3	4	5
6.	1	2	3	4	5
7.	1	2	3	4	5
8.	1			4	5
9.	1	2	3	4	5
10.	1	2	3	4	5
11.	1	2	3	4	5
12.	1	2	3	4	5
13.	1		3	4	5
14.	1	2	3	4	5
15.	1	2	3	4	5
16.	1	2	3	4	5
17.	1	2	3	4	5
18.	1	2	3	4	5
19.	1	2	3	4	5
20.	1	2	3	4	5
	2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17.	3. 1 4. 1 5. 1 6. 1 7. 1 8. 1 9. 1 10. 1 11. 1 12. 1 13. 1 14. 1 15. 1 16. 1 17. 1 18. 1 19. 1	2. 1 2 3. 1 2 4. 1 2 5. 1 2 6. 1 2 7. 1 2 8. 1 2 9. 1 2 10. 1 2 11. 1 2 12. 1 2 13. 1 2 14. 1 2 15. 1 2 16. 1 2 17. 1 2 18. 1 2 19. 1 2	2. 1 2 3 3. 1 2 3 4. 1 2 3 5. 1 2 3 6. 1 2 3 8. 1 2 3 9. 1 2 3 10. 1 2 3 12. 1 2 3 13. 1 2 3 14. 1 2 3 15. 1 2 3 16. 1 2 3 17. 1 2 3 18. 1 2 3 19. 1 2 3	2. 1 2 3 4 3. 1 2 3 4 4. 1 2 3 4 5. 1 2 3 4 6. 1 2 3 4 8. 1 2 3 4 9. 1 2 3 4 10. 1 2 3 4 12. 1 2 3 4 13. 1 2 3 4 15. 1 2 3 4 16. 1 2 3 4 17. 1 2 3 4 19. 1 2 3 4

Highly Sensitive Persons Scale (Pluess, 2018)

Pluess, M., Assary, E., Lionetti, F., Lester, K. J., Krapohl, E., Aron, E. N., & Aron, A. (2018). Environmental sensitivity in children: Development of the Highly Sensitive Child Scale and identification of sensitivity groups. *Developmental psychology*, 54(1), 51.

- 1. I find it unpleasant to have a lot going on at once
- 2. Some music can make me really happy
- 3. I love nice tastes
- 4. Loud noises make me feel uncomfortable
- 5. I am annoyed when people try to get me to do too many things at once
- 6. I notice it when small things have changed in my environment
- 7. I get nervous when I have to do a lot in little time
- 8. I love nice smells
- 9. I don't like watching TV programs that have a lot of violence in them
- 10. I don't like loud noises
- 11. I don't like it when things change in my life
- 12 When someone observes me, I get nervous. This makes me perform worse than normal.

The Positive and Negative Affectivity Scale Questionnaire (PANAS; Watson, Clark, & Tellegan, 1988)

Watson D., Clark, L. A., & Tellegan, A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS scales. *Journal of Personality and Social Psychology*, 54(6): 1063-1070.

This scale consists of a number of words that describe different feelings and emotions. Read each item and then list the number from the scale below next to each word. Indicate to what extent you feel this way right now, that is, at the present moment OR indicate the extent you have felt this way over the past week (circle the instructions you followed when taking this measure)

Very Slightly or Not at All	A Little		Moderately	Quite a Bit	Extremely
1	2	3	4		5
1. Interested		=	11. Irrit	able	
2. Distressed		-	12. Aler	t	
3. Excited		=	13. Ash	amed	
4. Upset		_	14. Insp	oired	
5. Strong		_	15. Ner	vous	
6. Guilty		_	16. Det	ermined	
7. Scared		_	17. Atte	entive	
8. Hostile		_	18. Jitte	ery	
9. Enthusiastic		_	19. Acti	ve	
10. Proud		_	20. Afra	nid	

Tybur 3 Domain Disgust Questionnaire (Tybur, 2009)

Tybur, J. M., Lieberman, D., & Griskevicius, V. (2009). Microbes, mating, and morality: Individual differences in three functional domains of disgust. *Journal of Personality and Social Psychology*, *97*: 103–122.

The following items describe a variety of concepts. Please rate how disgusting you find the concepts described in the items, where 0 means that you do not find the concept disgusting at all and 6 means that you find the concept extremely disgusting.

	Not at all disgusting						Extremely disgusting
Shoplifting a candy bar from a convenience store	0	1	2	3	4	5	6
2. Hearing two strangers having sex	0	1	2	3	4	5	6
3. Stepping on dog poop	0	1	2	3	4	5	6
4. Stealing from a neighbor	0	1	2	3	4	5	6
5. Performing oral sex	0	1	2	3	4	5	6
Sitting next to someone who has red sores on their arm	0	1	2	3	4	5	6
A student cheating to get good grades	0	1	2	3	4	5	6
Watching a pornographic video	0	1	2	3	4	5	6
Shaking hands with a stranger who has sweaty palms	0	1	2	3	4	5	6
10. Deceiving a friend	0	1	2	3	4	5	6
 Finding out that someone you don't like has sexual fantasies about you 	0	1	2	3	4	5	6
 Seeing some mold on old leftovers in your refrigerator 	0	1	2	3	4	5	6
 Forging someone's signature on a legal document 	0	1	2	3	4	5	6
 Bringing someone you just met back to your room to have sex 	0	1	2	3	4	5	6
Standing close to a person who has body odor	0	1	2	3	4	5	6
Cutting to the front of a line to purchase the last few tickets to a show	0	1	2	3	4	5	6
17. A stranger of the opposite sex intentionally rubbing your thigh in an elevator	0	1	2	3	4	5	6
18. Seeing a cockroach run across the floor	0	1	2	3	4	5	6
 Intentionally lying during a business transaction 	0	1	2	3	4	5	6
 Having anal sex with someone of the opposite sex 	0	1	2	3	4	5	6
21. Accidentally touching a person's bloody cut	0	1	2	3	4	5	6

Revised SocioSexual Orientation Inventory (Penke & Asendorpf, 2008)

Penke, L., & Asendorpf, J. B. (2008). Beyond global sociosexual orientations: A more differentiated look at sociosexuality and its effects on courtship and romantic relationships. *Journal of Personality and Social Psychology, 95*, 1113-1135.

Appendix

The Revised Sociosexual Orientation Inventory (SOI-R)

Please respond honestly to the following questions:

□ 5 – about once every two weeks
□ 6 – about once a week
□ 7 – several times per week
□ 8 – nearly every day
□ 9 – at least once a day

Please respond	nonestry to	the following question	ns:						
1. With how i	many differen	nt partners have you h	ad sex within	the past 12 month	hs?				
0	1	2	3	4	5–6	7–9	10-19	20 or more	
	many differen	nt partners have you h	_					20 01 111010	
0	1	2	3	4	5-6	7–9	10-19	20 or more	
3. With how i	many differen	nt partners have you h	ad sexual inte	ercourse without h	aving an interest	in a long-term	committed relations	ship with this	
person?					·				
0	1	2	3	4	5-6	7–9	10-19	20 or more	
4. Sex withou	t love is OK.								
1	2	3	4	5	6	7	8	9	
Strongly dis	agree							Strongly agree	
I can imagi	ine myself be	ing comfortable and e	enjoying "cast	al" sex with diffe	rent partners.				
1	2	3	4	5	6	7	8	9	
Strongly disag	ree							Strongly agree	
6. I do not wa	ant to have se	x with a person until	I am sure tha	it we will have a l	ong-term, seriou	s relationship.			
1	2	3	4	5	6	7	8	9	
Strongly disag	ree							Strongly agree	
	do you have	fantasies about havin	g sex with so	meone with whom	you do not hav	e a committed re	omantic relationship	p?	
□ 1 – never									
□ 2 – very sel	dom								
□ 3 – about or	nce every two	or three months							
□ 4 – about or									
□ 5 – about or		weeks							
□ 6 – about or									
□ 7 – several (ek							
□ 8 – nearly e									
□ 9 – at least									
		ience sexual arousal v	vhen you are	in contact with so	meone with who	om you do <i>not</i> h	ave a committed ro	mantic	
relationship	?								
□ 1 – never									
□ 2 – very sel									
		or three months							
□ 4 – about or									
□ 5 – about or		weeks							
□ 6 – about or									
□ 7 – several t		2K							
	□ 8 – nearly every day								
□ 9 – at least		ton do vou bavo sece	anaous factor	ios about bavine :	or with compan	a wan bawa inst	mat?		
9. In everyday □ 1 – never	me, now on	ten do you have spon	ancous rantas	sies about naving s	sea with someon	e you have just	metr		
	dom								
□ 2 – very sel		or three month-							
		or three months							
□ 4 – about or	nce a month								

Items 1-3 should be coded as $0=1, 1=2, \ldots, 10-19=8, 20$ or more =9; they can then be aggregated to form the Behavior facet. After Item 6 is reverse coded, Items 4-6 can be aggregated to form the Attitude facet. Aggregating Items 7-9 results in the Desire facet. Finally, all nine items can be aggregated as the total score of global sociosexual orientation.

When Items 1-3 are presented with open response format instead of the rating scales, Items 2, 4, and 7 of the original SOI (Table 1) can be added to the SOI-R to allow for calculating the SOI total score in addition to the SOI-R scores. In this case, the open responses should be recoded to the rating scale format (i.e., $0 = 1, 1 = 2, \ldots, 20$ to max = 9) before the SOI-R scores are determined.

Alternatively, we also developed a version of the SOI-R with 5-point rating scales, which might be more appropriate for samples with less educated or less test-experienced participants. In this version, the scale alternatives are 0, 1, 2-3, 4-7, and 8 or more for the Behavior items, 1 (strongly disagree) to 5 (strongly agree) for the Attitude items, and never, very seldom, about once a month, about once a week, and nearly every day for the Desire items. In a large, heterogeneous online sample (N = 8,549), the SOI-R with five response alternatives per item achieved good internal consistencies ($\alpha = .83$, .81, .82, and .85 for the total score and the facets Behavior, Attitude, and Desire, respectively). Further information on the SOI-R can be found at www.larspenke.eu/soi-r

Mental Health Measures

Patient Health Questionnaire (PHQ-9; Kroenke & Spitzer, 2002)

Kroenke K., Spitzer R.L. (2002). The PHQ-9: a new depression and diagnostic severity measure. *Psychiatr Ann*, 32: 509-21.

(Note: The question about suicide has been deleted).

Over the last 2 weeks, how often have you been bothered by any of the following problems? (0 = not at all; several days = 1; More than half the days = 2; Nearly every day = 3)

- 1. Little interest or pleasure in doing things
- 2. Feeling down, depressed, or hopeless
- 3. Trouble falling or staying asleep, or sleeping too much
- 4. Feeling tired or having little energy
- 5. Poor appetite or overeating
- 6. Feeling bad about yourself/failure
- 7. Trouble concentrating on things
- 8. Moving or speaking so slowly that other people could have noticed. Or being fidgety/restless.

If you checked off any problems, how difficult have these problems made it for you to do your work, take care of things at home, or get along with other people?

PAI-BOR (Morey, 1991)

Morey, L. C. (1991). *Personality Assessment Inventory: Professional Manual.* Odessa, FL: Psychological Assessment Resources.

Read each statement and decide if it is an accurate statement about you. Circle your answer after each statement.

False, not at all true – F Slightly True – ST Mainly True – MT Very True - VT

1. My mood can shift quite suddenly.	F	ST	MT	VT	
2. My attitude about myself changes a lot.	F	ST	MT	VT	
3. My relationships have been stormy.	F	ST	MT	VT	
4. My moods get quite intense.	F	ST	MT	VT	
5. Sometimes I feel terribly empty inside.	F	ST	MT	VT	
6. I want to let certain people know how much they've hurt me.	. F	ST	MT	VT	
7. My mood is very steady.	F	ST	MT	VT	
8. I worry a lot about other people leaving me.	F	ST	MT	VT	
9. People once close to me have let me down.	F	ST	MT	VT	
10. I have little control over my anger.	F	ST	MT	VT	
11. I often wonder what I should do with my life.	F	ST	MT	VT	
12. I rarely feel very lonely.	F	ST	MT	VT	
13. I sometimes do things so impulsively that I get into trouble.	F	ST	MT	VT	
14. I've always been a pretty happy person.	F	ST	MT	VT	
15. I can't handle separation from those close to me very well.	F	ST	MT	VT	
16. I've made some real mistakes in the people I've picked as fri	ends. F	ST	MT	VT	
17. When I'm upset, I typically do something to hurt myself.	F	ST	MT	VT	
18. I've had times when I was so mad I couldn't do enough to ex	kpress n	ny anger.	F	ST	MT VT
19. I don't get bored very easily.	F	ST	MT	VT	
20. Once someone is my friend, we stay friends.	F	ST	MT	VT	
21. I'm too impulsive for my own good.	F	ST	MT	VT	
22. I spend money too easily.	F	ST	MT	VT	
23. I'm a reckless person.	F	ST	MT	VT	
24. I'm careful about how I spend my money.	F	ST	MT	VT	

Family Questionnaire (Felitti, 1997)

Felitti, V. J., Anda, R. F., Nordenberg, D., Williamson, D. F., Spitz, A. M., Edwards, V., ... & Marks, J. S. (1997). Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults: The Adverse Childhood Experiences (ACE) Study. *American journal of preventive medicine*, *56*(6), 774-786.

Please answer these questions recognitioning back to your childhood using the scale:

1 2 3 4 5
Not at All Very Often

- 1. How often did a parent or other adult in the household make you feel that you were loved, supported and cared for?
- 2. How often did a parent or other adult in the household swear at you, insult you, put you down, or act
- 3. How often did a parent or other adult in the household express physical affection for you, such as
- 4. How often did a parent or other adult in the household push, grab, shove, or slap you?
- 5. How often would you say that a parent or other adult in the household behaved violently toward a
- 6. How often would you say there as quarreling, arguing, or shouting between your parents?
- 7. How often would you say there was quarreling, arguing, or shouting between you're a parent and you?
- 8. How often would you say there was quarreling, arguing, or shouting between a parent and one of
- 9. How often would you say there was quarreling, arguing, or shouting between your sibling(s) and you?
- 10. Would you say the household you grew up in was chaotic and disorganized?
- 11. In your childhood, did you live with anyone who was a problem drinker or alcoholic, or who used street drugs?
- 12. Would you say that the household you grew up in was well-organized and well-managed?
- 13. Would you say you were neglected while you were growing up, that is, left on your own to fend for yourself?

Perceived Stress Scale (Cohen, Kamarck, & Mermelstein, 1983)

Cohen, S., Kamarck, T., & Mermelstein, R. (1983). A global measure of perceived stress. *Journal of health and social behavior*, 385-396.

0 = Never 1= Almost Never 2=Sometimes 3=Fairly Often 4=Very Often

In the last month:

- 1. How often have you been upset because of something that happened unexpectedly?
- 2. How often have you felt that you were unable to control the important things in your life?
- 3. How often have you felt nervous and "stressed"?
- 4. How often have you felt confident about your ability to handle your personal problems?
- 5. How often have you felt that things were going your way?
- 6. How often have you found that you could not cope with all the things you had to do?
- 7. How often have you been able to control irritations in your life?
- 8. How often have you felt that you were on top of things?
- 9. How often have you been angered because of things that were outside of your control?
- 10. How often have you felt difficulties were piling up so high that you could not overcome them?